Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims

1. (currently amended) A method for recording microscopic images with high optical resolution of particles or organisms suspended in a liquid, comprising introducing ~~characterized in that~~ the suspension ~~is introduced~~ in a measuring cell, ~~especially a flow cuvette~~, and recording the image of the suspension ~~is recorded~~ by an optical sensor, wherein the optical sensor and measuring cell are moving relative to one another while the contents of the measuring cell are imaged ~~completely or in part~~.

2. (currently amended) The method according to claim 1, characterized in that said sensor is moving along the measuring cell~~, optionally together with optical elements and a light source~~.

3. (currently amended) The method according to claim 1, characterized in that said measuring cell is moving along the sensor ~~and optionally said optical elements and a light source~~.

4. (currently amended) The method according to claim 1 ~~or any of the further claims~~, characterized in that said measuring cell ~~(cuvette)~~ is imaged ~~completely or in part~~ onto said optical sensor by the movement of optical elements.

5. (currently amended) The method according to claim 1 ~~or any of the further claims, characterized in that, after said introducing of the suspension,~~ further comprising allowing the particles to ~~contained first~~ sink onto the ground of the measuring cell or into a region above the ground, ~~and thus~~ wherein only part of the measuring cell contains the particles or organisms to be examined, ~~so that this~~ imaging the ground or the region above ~~region can be imaged~~ with a high optical resolution, and ~~covered~~ covering the ground or the region above by the optical sensor.

6. (currently amended) The method according to claim 1 ~~or any of the further claims, characterized in that, after said introducing of the suspension~~, further comprising

allowing the particles ~~contained first~~ to rise to ~~the~~ an upper limiting surface of the measuring cell or into a region below the upper limiting surface, ~~and thus~~ wherein only part of the measuring cell contains the particles or organisms to be examined, ~~so that this~~ imaging the upper limiting surface or the region below ~~region can be~~ ~~imaged~~ with a high optical resolution, and ~~covered~~ covering the upper limiting surface or the region below by the optical sensor.

7. (currently amended) The method according to claim 5 ~~1 or any of the further claims~~, ~~characterized in that~~ wherein said sinking or rising of the objects within the cuvette can be effected by one or more of the following: ~~different~~ biological techniques, physical techniques, ~~or~~ chemical techniques, ~~as well as by~~ sedimentation, and ~~or~~ buoyancy.

8. (currently amended) The method according to claim 1 ~~or any of the further claims~~, ~~characterized in that said~~ further comprising providing transmitted light illumination, wherein a light source ~~and optional screen and lens systems (condenser) are~~ is situated on one side of the measuring cell, and ~~the objective (and optional screen systems) and~~ the optical sensor and an objective sensor are located on the ~~other,~~ opposite side of the measuring cell ~~(transmitted light illumination)~~.

9. (currently amended) The method according to claim 1 further comprising providing incident light illumination by situating a ~~or any of the further claims~~, ~~characterized in that said~~ light source, an objective, and the optical sensor ~~and optional screen and lens systems (condenser) are situated~~ on the same side of the measuring cell ~~as the objective (and optional screens) and optical sensor (incident light illumination)~~.

10. (currently amended) The method according to claim 8, ~~characterized in that said~~ wherein the transmitted light illumination is ~~realized as a~~ bright field illumination.

11. (currently amended) The method according to claim 8, ~~characterized in that said~~ wherein the transmitted light illumination is ~~realized as a~~ dark field illumination.

12. (currently amended) The method according to claim 8, ~~characterized in that said~~ wherein the transmitted light illumination ~~can be realized as a~~ is phase contrast illumination ~~with the known phase contrast methods~~.

13. (currently amended) The method according to claim 9, wherein ~~characterized in that said~~ the incident light illumination ~~can be realized as a~~ is fluorescence illumination ~~with the known fluorescence methods~~.

14. (currently amended) The method according to claim 9, further comprising illuminating the objects in the measuring cell with a defined spectral intensity distribution of the incident light by a ~~10, 11 or 12, characterized in that~~ a suitable light source or the insertion of one or more suitable filters ~~enables the objects in the cuvette to be illuminated with a defined spectral intensity distribution of the incident light (illumination side)~~.

15. (currently amended) The method according to claim 9 further comprising illuminating the optical sensor with a defined spectral intensity distribution of the incident light by ~~10, 11, 12, 13 or 14, characterized in that~~ a suitable light source or the insertion of one or more suitable filters enables the optical sensor to be illuminated with a defined spectral intensity distribution of the incident light ~~(detection side)~~.

16. (currently amended) The method according to claim ~~10, 11, 12, 13, or 14, characterized in that~~ 8, wherein the illumination ~~modes~~ is one or more of the following: bright field, dark field, and phase contrast illumination. ~~mentioned in the claims may also be employed in the possible combinations resulting therefrom~~.

17. (currently amended) The method according to claim 1, further comprising admixing ~~characterized in that~~ the suspension ~~to be examined has been admixed~~ with stains prior to the introducing step.

18. (currently amended) The method according to claim ~~1, characterized in that~~ 14, further comprising changing the one or more ~~all or part of~~ ~~the~~ filters ~~employed are changed~~ automatically or manually.

19. (cancelled)

20. (currently amended) A device for recording microscopic images with high optical resolution of particles or organisms suspended in a liquid, wherein ~~characterized in that~~

the suspension is introduced in a measuring cell, ~~especially a flow cuvette,~~ and the image is recorded by an optical sensor, and further wherein the optical sensor and measuring cell are movable relative to one another and the contents of the measuring cell can be imaged ~~completely or in part during such movement~~.

21. (currently amended) The device according to claim 20, ~~characterized in that~~ ~~said~~ wherein a light source is ~~and optional screen and lens systems~~ ~~(condenser) are~~ situated on one side of the measuring cell, and the ~~objective (and optional screen systems) and~~ an objective sensor and the optical sensor are located on the other, opposite side of the measuring cell ~~(transmitted light illumination)~~.

22. (currently amended) The device according to claim 20 ~~or 21, characterized in that~~ ~~said~~ wherein a light source ~~and optional screen and lens systems (condensor) are~~ is situated on the same side of the measuring cell as ~~the~~ an objective sensor ~~(and optional screens) and~~, and the optical sensor ~~(incident light illumination)~~.

23. (new) The method according to claim 1, wherein said measuring cell is a flowing cuvette.

24. (new) The device according to claim 20, wherein said measuring cell is a flowing cuvette.

25. (new): The method according the claim 8, further comprising providing a screen and lens system on the same side of the measuring cell as the light source.

26. (new): The method of claim 8 wherein the screen and lens system is a condenser.

27. (new): The method of claim 9, wherein the illumination is fluorescence illumination, spectral intensity distribution of the incident light, or a combination thereof.